

DEFENSE BUSINESS BOARD



Presentation on:

**Future Models for Federally Funded
Research and Development Center
Contracts**

Task Group

MEMBERS

- Mr. Phil Odeen (Chair)
- Mr. Taylor Glover
- Mr. Jerry Hultin

STAFF

- Lt Col Tony Cianciolo, ANG
- Maj George Delong, USAF

The Task

Establish DBB Task Group to recommend an appropriate future model and focus for DoD sponsored Federally Funded Research and Development Center (FFRDC) contracts. Specifically, the DBB should;

- Review existing governance models, compare management activities to those of the private sector or other governmental organizations.
- Identify areas currently being addressed by FFRDCs and whether the work should continue, and what barriers need to be overcome.
- Review University Affiliated Research Centers (UARCs) in the same manner, as some perform services similar to FFRDCs.



Methodology

- Review previous DoD and outside reports and studies
- Interviews
 - OSD oversight officials (AT&L, Comptroller)
 - Service Sponsors of DoD FFRDCs & UARCs
 - DoD FFRDC Chief Executive Officers
 - UARC Directors
 - Former Government Officials
 - Government Accountability Office
 - Professional Services Council
 - Defense & Technical Services Industry



FFRDC - Description

- The FFRDCs serve all the military departments, OSD, Defense Agencies, and NSA. When created in the 1940s and 1950s they possessed technology that was not available in commercial companies (e.g. radar and space operations). Today, the commercial sector has robust capabilities in most of these areas. FFRDCs are also considered free of potential conflicts which can be important in evaluating programs and technology.
- There are ten FFRDCs across three categories.
 - Research and Development Laboratories – 3
 - Systems Engineering and Integration Centers – 2
 - Study and Analysis Centers – 5
- Total funding is about \$2 Billion and they provide over 5700 staff years of technical effort (STE).
 - The two SE&I Centers receive over 50% of the funds and staff years.
 - The five S&A Centers receive less than 20% of the funds and staff years.
- A small portion of the FFRDC funds are line items in the budget (less than 10%). The rest of the funding is from program offices who funnel it through the sponsor.



UARCs – Description

- UARCs are not centrally managed and primarily serve the military departments, Program Executive Officers (PEOs), and Systems Commands. Their purpose is to give DoD access to the advanced technology of leading universities. There is no formal accounting or management of either the funds spent or STEs provided.
- UARCs are not centrally managed and primarily serve the Services, PEOs, and Systems Commands.
- The 13 UARCs range in size from over \$1B annually to less than \$2M. The small ones provide a specific technology to a Service or agency. The large ones provide a spectrum of technical support.
- Funds for the UARCs come from the Services or agency customer. There is no line item funding in the budget.



FFRDC - Governance

- Regulations and Guidance
 - Federal Acquisition Regulation (FAR) 35.017
 - DoD FFRDC Management Plan 2011
 - USD (AT&L) concurrence required prior to renewal of contract
- The sponsor conducts Comprehensive Review every 5 years which is the key management process. The review is a detailed assessment of the FFRDC prepared with inputs from users of the FFRDC's services.
 - Evaluate technical needs and mission requirements being performed and whether they continue to be valid.
 - Consider alternative sources for the services provided.
 - Provide detailed assessment of the efficiency and effectiveness of the FFRDC.
 - Conduct assessment of their management controls to ensure cost-effective operation.
 - Determine if criteria for establishing a FFRDC is satisfied and that the Sponsoring Agreement is in compliance with the FAR and DoD Management Plan.
- The total work performed by FFRDCs for DoD is capped as a result of Congressional action. The 5700 STEs that can be provided to the FFRDCs are allocated to them by OSD/Services. The allocation is reviewed annually, but changes are minor.



Findings

- There is a broad agreement that the FFRDCs/UARCs provide high quality R&D and technical support to DoD that meet DoD needs. Their customers are very positive about the quality of the work and skills of their people. When supporting weapon system decisions, they are seen as able to do so without conflicts of interest.
- FFRDCs attract and retain high quality staff and have deep expertise and long-term experience in key technical areas.
 - Some routinely upgrade their talent base, moving out low performers to ensure the most technically proficient staff. Others indicate this is also a priority.
- Unlike when many FFRDCs were created, today the for-profit sector can now provide most of the technical services provided by FFRDCs. In many cases however, there are sound reasons to give the work to FFRDCs, such as potential conflicts of interest, access to confidential competitive information or deep historical knowledge and experience not available in for-profit companies.



Findings (continued)

- Areas of expertise and the focus of their services have evolved over time and, in most cases, they now provide a much broader range of offerings. The Study and Analysis Centers in particular, provide diverse services to customers across client organizations.
 - While they have some areas where their expertise is broad and enduring, much of the work is short term using a small number of staff.
 - The reasons given for using them are 1) deep experience or expertise, 2) close relations with customer, and 3) responsiveness.
- FFRDCs provide quick response to unanticipated DoD needs via sole source contracts without the delays of the competitive process.
 - This is especially useful for customers of the analytic FFRDCs.
 - This results in cases where a for-profit company could provide the service if the government customer was willing and had the time to undertake a competition.
 - The Program Offices and Contracting Officers are not incentivized to look for ways to provide a timely competition (e.g. a task order contract) in these cases.



Findings (continued)

- Significant changes in the acquisition of technology services over the past 5 to 10 years have made the use of an FFRDC more attractive. DoD's embrace of "low price, technically acceptable" choices in lieu of "best value" during the budget crisis forced industry to lose current and future capability given the need to reduce costs and compete on price. FFRDCs, without this market competitive pressure, have been more able to preserve higher cost talent and capabilities.
 - The sharp rise in bid protests also makes price a more important factor in decisions as technical differences are difficult to assess and low cost frequently prevails.
 - At the same time, the government has steadily lost its more experienced, technically capable staff making judgements on relative technical merit difficult. All this makes an FFRDC a more attractive, less risky choice.
- Proposals to provide significantly different support roles to DoD, especially in reaching out to the commercial sector for advanced technologies or to assist DoD in vetting advanced technologies, have not been generally adopted.



Findings (continued)

- The five-year comprehensive review is a long, detailed process that assesses the current services and support to DoD missions. But it is not clear if this review explores the opportunity for the FFRDCs to evaluate and offer solutions that meet the evolving (and potentially revolutionary) defense threats posed by other nations. A more independent and critical assessment could provide fresh insights on their role and ways to enhance FFRDC contributions.
- The STE process constrains the growth of DoD FFRDCs, limiting competition with the private sector. New work requires reductions in other areas of effort.
 - It is not clear how rigorous is the allocation process. Is shifting STE to meet higher technical challenges considered in lieu work that could be performed by for-profit companies? The very limited changes in STE allocations suggest not.
 - FFRDCs are free to work for other Federal agencies. Some FFRDCs support other Federal departments and agencies and a few have a broad base of business outside of DoD and the government.



Findings (continued)

- While cost comparisons are very complicated, overhead rates and compensation costs do not appear to be significantly different from the high-end rates of the more technical providers.
 - Several studies in 2012 showed roughly similar man-hour costs; a more recent update (in 2014) had similar results.
 - For-profit observers suggest FFRDC cost multiples in today's highly competitive environment are higher with the difference in General and Administrative and overhead expenses, areas where cost pressures on for-profit companies have been severe. A review of FFRDC rates confirms this.
 - For-profit companies however, are frequently shifting bids to lower cost bands and the percentage of work using higher rates have declined significantly. Thus the resulting cost to the government can be much lower in some cases.
- The UARCs play a key role in supporting the Services and other agencies on technical issues. They have outstanding access to advanced technology at leading universities and have the potential to play a greater role in DoD's outreach to the non-DoD world.



Recommendations

To Ensure The FFRDCs Provide Continued Value:

- The FFRDC Comprehensive Reviews should take a fundamental look at the FFRDC Charter and Mission. The areas of focus to be addressed should include;
 - Give the FFRDCs a greater role in tracking and evaluating new science and technology that can enhance our military capabilities, avoid strategic or technological surprise, or counter a threat from our potential adversaries.
 - Give the responsibility for vetting and prototyping scientific breakthroughs and advanced technology being offered by defense industry and the private sector to ensure its relevance to DoD's capability needs and maturity. This is an area where the DoD has clear needs and inadequate in-house talent.
 - Clarify the roles of the FFRDCs and Defense industry to minimize friction and enhance cooperation. This would be especially important, if the FFRDCs are given a greater role assessing technology offered by industry.



Recommendations (continued)

- Conduct periodic (e.g. 7-10 year) in-depth reviews of FFRDCs by independent experts, to review their missions and priorities, assess the quality of their work and workforce; their capacity to provide independent, high-value, transformative analysis; and the relevance of their strategic or technical expertise.
- To reinforce the shift of focus to new technology, the STE allocation process should be strengthened to reduce the level of effort on less technically challenging work, which often could be performed by commercial companies, shifting their resources to the new focus discussed above
- Give clear guidance to program managers and contracting officers to compete work that does not require an FFRDC to perform.



Recommendations (continued)

- Direct DCAA to do a in-depth review of FFRDC overhead rates, to ensure they are not out of line with the commercial firms supporting DoD with comparable high-end technical support.
- Simplify the contracting process (e.g. use a 5-year IDIQ-type contract) to eliminate unneeded diversion of technical talent and dollars responding to complex, annual contract requests.
- Direct the Services to exploit the access to advanced technology at the UARC affiliated leading universities. These universities are excellent sources of advanced technology. This effort could be driven by the Service labs and/or systems commands.

